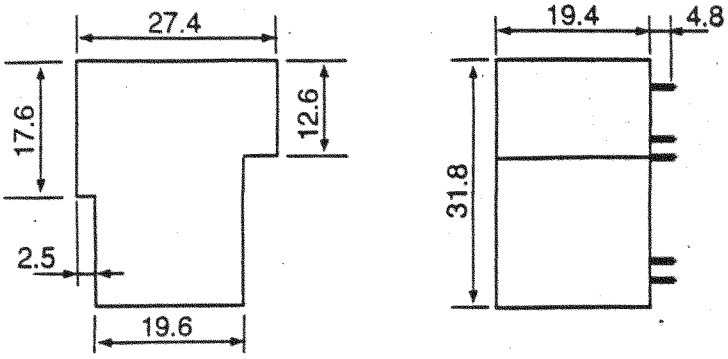
# COMPONENT SPECIFICATION

## FOR L90 – 24 SERIES RELAY

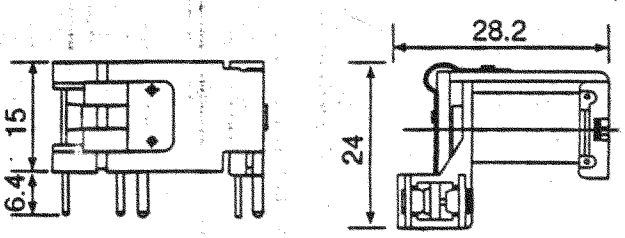
1. CONTACT DATA:
   - 1-1 Arrangement: 1 from C [ SPDT ]
   - 1-2 Material: Ag alloy.
   - 1-3 Rating: N/O : 20 Amperes at 30 V DC or 277 V AC resistive.
     2 HP 250 V AC or 1 HP 125 V AC Motor.
     N/C : 10 Amperes at 30 V DC or 277 V AC resistive.
     1/2 HP 250 V AC or 1/4 HP 125 V AC Motor.
   - 1-4 Resistance: Initial 50 milliohms. At load 1 amperes 6 V DC.
   - 1-5 Max. Switching Power ------- 7200 V A , 500W.
   - 1-6 Max. Switching Voltage ----- 277V AC , 30 V DC.
   - 1-7 Max. Carrying Current ------- 30 A.
2. COIL DATA:
   - 2-1 Voltage__24___ V.
   - 2-2 Resistance__600__ ohms ± 10% (at 25 ℃ ).
   - 2-3 Power DC__0.9 W__ at nominal voltage.
   - 2-4 Attract voltage __18__ V max.
   - 2-5 Release voltage __2.4__ V min.
   - 2-6 Attract time 15 ms max.
   - 2-7 Release time 15 ms max.
3. GENERAL DATA:
   - 3-1 Insulation material: Bobbin -- P.B.T.
   - 3-2 Insulation resistance: 100 Megohms nin. At 500 V DC.
   - 3-3 Dielectric Strength : Between Open Contact 1,500 V AC for 1 min.
     Between All Conductors 2,500 V AC for 1 min.
   - 3-4 Vibration resistance : Unerring ----- 10 to 55 Hz. double amplitude of 1.5mm.
     Destructive -- 10 to 55 Hz. double amplitude of 1.5 mm.
   - 3-5 Shock resistance : Unerring --------- 10 G. ( 11 ± 1 ms )
     Destructive ------ 100G. ( 6 ± 1 ms )
   - 3-6 Expected life: Mechanical more than 10,000,000 operation.
     Electrical more than 100,000 operation.
     At rated load.
   - 3-7 Temperature range : -55 ℃-------- +85℃.
   - 3-8 Approximate weight: 28 G .

# L90 DIMENSIONS (mm)

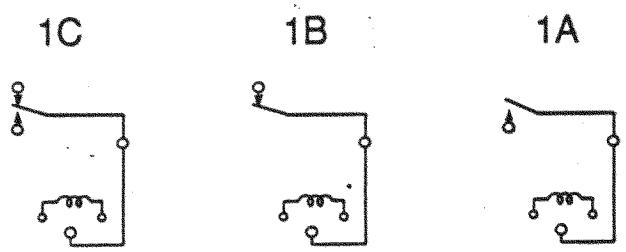
## Sealed Type



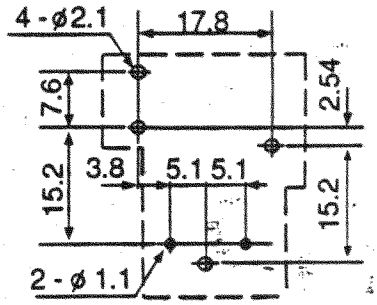

## Open Type




## WIRING DIAGRAM




## P.C.B. LAYOUT




## CONTACT RATING

| | | | |
|---|---|---|---|
| 1PST-NO | Resistive ( Cos.θ = 1 ) | AC 277V / 30A | DC 30V / 20A |
| 1PST-NC | Resistive ( Cos.θ = 1 ) | AC 277V / 30A | DC 30V / 10A |
| 1PDT | Resistive ( Cos.θ = 1 ) | NO: AC 277V / 30A | DC 30V / 20A |
| | Resistive ( Cos.θ = 1 ) | NC: AC 277V / 30A | DC 30V / 10A |

## GENERAL DATE

| | |
|---|---|
| Insulation Resistance | 100 Megohms min. at 500 VDC. |
| Breakdown Voltage | 1,500 VRMS,50/60 Hz between contact, 2,000 VRMS,50/60 Hz between all elements. |
| Contact Material | Silver - Cadmium Oxide as standard. |
| Contact Resistance | 100 milliohms max. (initial) |
| Coil Data | See chart. ( at 25℃ ) |
| Max. Allowable Voltage | 110 % nominal |
| Min. Drop - out Voltage | 10 % of nominal |
| Operation Time | 15 msec max. |
| Release Time | 15 msec max. |
| Temperature Range | -55℃ ~ + 85℃ |
| Expected Life | With operation rate 30/min.<br>Mechanical - 10,000,000 operations min.<br>Electrical - 100,000 operations min. at rated load. |
| Weight | 23 ~ 25 grams |